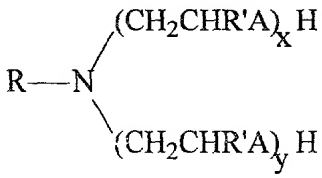
WHAT IS CLAIMED IS:

1. An invert emulsion fluid having utility for drilling, completing, or working over subterranean wells, said fluid comprising:

a) an oleaginous fluid;

b) a non-oleaginous fluid; and

c) an amine surfactant having the structure



wherein R is C_{12}-C_{22}; R' is an independently selectable from hydrogen or C_1 to C_3 alkyl; A is NH or O, and $1 \leq x+y \leq 3$.

2. The invert emulsion fluid of claim 1 wherein said oleaginous fluid comprises from about 30% to about 99% by volume of said fluid.

3. The invert emulsion fluid of claim 1 wherein said oleaginous fluid is selected from a group consisting of diesel oil, mineral oil, a synthetic oil, and combinations thereof.

4. The invert emulsion fluid of claim 1 wherein said oleaginous fluid further comprising from 5% to about 100% by volume of the oleaginous fluid of a material selected from a group consisting of esters, ethers, acetals, di-alkylcarbonates, hydrocarbons, and combinations thereof.

5. The invert emulsion fluid of claim 1 wherein said non-oleaginous fluid comprises from about 1% to about 70% by volume of said fluid.

6. The invert emulsion fluid of claim 1 wherein said non-oleaginous fluid is an aqueous liquid.

7. The invert emulsion fluid of claim 6 wherein said aqueous liquid is selected from the group consisting of sea water, a brine containing organic or inorganic dissolved salts, a liquid containing water-miscible organic compounds, and combinations thereof.

8. The invert emulsion fluid of claim 1 wherein R is unsaturated.

9. The invert emulsion of claim 1 further comprising a weighting agent or a bridging agent.

10. The invert emulsion of claim 9 wherein the weighting or bridging agent is selected form the group consisting of calcium carbonate, dolomite, siderite, barite, celestite, iron oxides, manganese oxides, ulexite, carnalite, and sodium chloride.

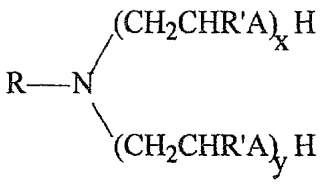
11. The invert emulsion of claim 1 wherein said amine surfactant is selected from diethoxylated tallow amine; diethoxylated soya amine; N-aliphatic-1,3-diaminopropane wherein the aliphatic group is a C_{12} to C_{22} hydrocarbon; or combinations thereof.

12. An invert emulsion fluid having utility for drilling completing, or working over subterranean wells, said fluid comprising:

a) an oleaginous liquid, said oleaginous liquid comprising from about 30% to about 99% by volume of said fluid;

b) a non-oleaginous liquid, said non-oleaginous liquid comprising from about 1% to about 70% by volume of said fluid; and

c) an amine surfactant present in said fluid at a concentration of 0.1% to 5.0% by weight of said fluid, said amine surfactant having a structure of:



wherein R is C_{12}-C_{22}; R' is an independently selectable from hydrogen or C_1 to C_3 alkyl; A is NH or O, and $1 \leq x+y \leq 3$.

13. The invert emulsion fluid of claim 12 wherein said oleaginous liquid is selected from a group consisting of diesel oil, mineral oil, a synthetic oil, and combinations thereof.

14. The invert emulsion fluid of claim 13 wherein said oleaginous fluid further comprising from 5 to about 100% by volume of the oleaginous fluid of a material selected from a group consisting of esters, ethers, acetals, di-alkylcarbonates, hydrocarbons, and combinations thereof.

15. The invert emulsion fluid of claim 14 wherein said non-oleaginous liquid is an aqueous liquid.

16. The invert emulsion fluid of claim 15 wherein said aqueous liquid is selected from the group consisting of sea water, a brine containing organic or inorganic dissolved salts, a liquid containing water-miscible organic compounds, and combinations thereof.

17. The invert emulsion fluid of claim 12 wherein R is unsaturated.

18. The invert emulsion of claim 12 wherein said amine surfactant is selected from diethoxylated tallow amine; diethoxylated soya amine; N-aliphatic-1,3-diaminopropane wherein the aliphatic group is a C_{12} to C_{22} hydrocarbon; or combinations thereof.

19. A method comprising

(a) using the fluid of claim 1 in the drilling, completion or workover of a well, wherein said fluid comes into contact with a producing formation; and

(b) injecting an acid functionally able to protonate the amine surfactant into the well so as to invert the emulsion to ease the removal of the oil based filter cake thus cleaning-up or stimulating the well.

20. A method for reversing the emulsion of claim 1, the method comprising admixing an acid with the fluid, the acid being functionally able to protonate the amine surfactant, in sufficient quantities so as to convert the emulsion to an oil-in-water type emulsion.

21. A method comprising

(a) drilling a well using the fluid of claim 1;

(b) separating the cuttings from the fluid; and

(c) contacting the cuttings with an acid solution so as to substantially remove the oleaginous liquid from the cuttings.

22. A method for reclaiming the fluid of claim 1 after use as a drilling, completion or workover fluid, the method comprising

(a) admixing the fluid with an acid, the acid being functionally able to protonate the amine surfactant, in sufficient quantities so as to convert the emulsion to an oil-in-water type emulsion;

(b) separating solids from the fluid; and

(c) admixing the fluid with a base, the base being functionally able to deprotonate the amine surfactant, in sufficient quantities so as to convert the emulsion to a water-in-oil type emulsion.